

# (12) United States Patent

### Haerle et al.

#### (54) POLISHING SLURRY INCLUDING ZIRCONIA PARTICLES AND A METHOD OF USING THE POLISHING SLURRY

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See application file for complete search history.

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**ABSTRACT** 

A polishing slurry can include zirconia particles. The polishing slurry can be used to polish conductive and insulating materials, and is particularly well suited for polishing oxide materials as well as metals. The characteristics of the zirconia particles can affect the polishing of workpieces. By selecting the proper characteristics, the polishing slurry can have a good material removal rate while still providing an acceptable surface finish. The zirconia particles can be used as a replacement for, or in conjunction with, ceria or other abrasive particles. The content of zirconia particles in the polishing slurry may be less than a comparable polishing slurry having silica or alumina particles.

#### 11 Claims, 5 Drawing Sheets



